

Remarks

Claims 1-3 and 5-27 remain in the application. The independent claims 1, 6 and 15 are amended, and independent claims 17 and 21 are resubmitted without amendments, but with arguments in support of the patentability of the claims in accordance with the discussion of the claimed subject matter in a telephone interview conducted with the undersigned attorney and the Examiner. Accordingly, all claims are considered allowable as discussed in greater detail below, and the application is placed in condition for allowance.

At the interview, Applicant's attorney presented argument that the claims present features not found as an obvious combination of the teachings of the references relied upon by the Examiner. In particular, the difficulties of properly handling complicated audio signals such as AC-3 with the related data for operating a direct satellite broadcast system does not readily evolve from the combined teachings of the cited references. In particular, the utilization of sample rate conversion technique for AES-3 signals in signal processing as taught by Gaalaas, would not motivate or be readily combined with the use of a multiplexer for combining transmission signals to make-up a broadcast multiplexed at a second rate higher than the rate of a first program. These combined teachings do not resolve the problems addressed by the claimed invention. Moreover, the combination does not teach or suggest any solution to the problems of protecting fragile signals such as AC-3 audio which may need to be synchronized with video in a direct satellite broadcast. In addition, the Examiner acknowledged that environment of a satellite broadcast system, and a resolution of the problems encountered therein, is not addressed by the combined teachings of the references, and that further reference to the satellite broadcast uplink could distinguish the claimed invention over an obvious combination of the teachings of the references under 35 U.S.C. § 103. Accordingly, the amendments and the following comments are in agreement with the recognitions expressed at the interview and are believed to place the application in condition for allowance.

The Examiner rejected claims 1-3 and 5-27 under 35 U.S.C. § 103(a) as obvious from the teachings of Gaalaas et al. in view of Elia et al. As to claims 1, 5, and 15-19, the Examiner argued generally that portions of the claimed invention might be understood to exist from various portions of the cited references. However, the method steps discussed in these claims do not occur in the preparation of satellite broadcast according to the references, particularly with respect to AC-3 data providing complex and fragile audio data signals. Accordingly, while claim 1 originally referred to delivery to program content receivers by a direct broadcast satellite system in lines 11 and 12, the preamble has been amended in accordance with the Examiner's suggestion to reemphasize the satellite broadcast aspects of the method, and amendments in lines 2 and 3 have been made accordingly. Accordingly, it is believed that the method steps particularly defined in the claim now patentably define how multiplexed audio and video signals and disruption detection at the uplink, may be employed in manner not taught or suggested by the combined teachings of the references relied upon by the Examiner and the other references of record.

As to independent claim 6, the claim expressly refers to the method for controlling the status of channel bits in which audio and video signals interact in the context of satellite broadcast communications. Accordingly, express reference to the satellite broadcast communications added in line 2 reemphasizes the environment in accordance with the suggestion of the Examiner. Moreover, the regenerating step of channel status bits based on the audio signal particularly and patentably defines the present invention over the combined teachings of the references relied upon by the Examiner and the other references of record.

In the statement of rejection, no particular statements as to the relevance of the features defined in independent claims 15 and 17 was stated by the Examiner in arguing that the combined teachings make the claimed subject matter obvious. Moreover, the recitation of direct satellite broadcast system in the preamble is expressly combined with recitation of the uplink processor where the combined features of the encoder as particularly defined and the multiplexer as defined are used. As a result, the claim particularly recites the features discussed at the interview and the combination is not taught or suggested by the combined

teachings of the references of record. Nevertheless, claim 15 has been clarified at line 4 to remove an apparent redundant reference to a sensor, and in line 6 to clarify the sensed audio signal format as referred to in line 4. These amendments merely clarify the subject matter and do not further narrow the claim. Similarly, claim 7 has a preamble that expressly refers to the direct satellite broadcast system comprising the features and the signal correction used by Applicant to provide studio direct broadcast to the terrestrial user.

Independent claim 21 refers to a device for playing AC-3 signal in sync with a video signal within a direct satellite broadcast system, thus particularly and patentably defining the monitor processing reference signals as particularly defined in the claim. Although the Examiner previously argued that as to claim 21, the Gaalaas et al. teaches limitations of claim 1 in a sound card entity, the reference alone or in combination does not teach or suggest the satellite broadcast features expressly defined in claim 21. As a result, the claim is not properly rejected under 35 U.S.C. § 103. Likewise, dependent claims 22-27 are likewise considered allowable, especially in the context of the communication system expressly referenced as a satellite broadcast system.

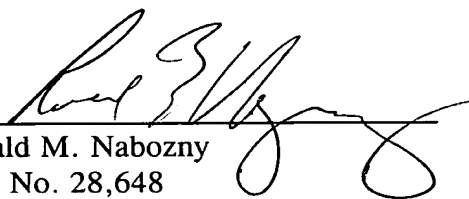
The amendments are made at Applicant's first opportunity to address the comments made by the Examiner during a telephone interview. Accordingly, these amendments are made at the first opportunity to address those comments and could not have been made earlier. Moreover, the amendments do not add new matter to the application, as the limitations are fully supported in the written description and claims as discussed above. Accordingly, the amendments are proper for entry in the application, and place the application in condition for allowance.

In view of the foregoing, Applicant respectfully submits that the present application is now in condition for allowance, and such action is respectfully requested.

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